

WHAT IS CLAIMED IS:

1 Sub 1. A method for providing functionality on a network, the network comprising nodes, the
2 method comprising:
3 AI an agent moving from a first device to a target device; and
4 at the target device, the agent performing application layer gateway functionality.

1 2. The method of claim 1 where the agent acts as a web cache.

1 CI 3. The method of claim 1 where the agent acts as a media transcoder.

4. The method of claim 1 where the agent acts as a firewall.

5. The method of claim 1 where, to act as the application layer gateway, the agent:
accepts traffic sent to the target device addressed to a client device;
performs at least one of filtering the traffic or modifying the traffic; and
sends the traffic to the client device.

6. The method of claim 5 where the agent may automatically move to a second target device
and act as an application layer gateway.

7. The method of claim 1 further comprising:
the agent, before performing application layer gateway functionality, installing a software
module to aid in performing such functionality.

8. The method of claim 1 where the agent may automatically uninstall itself.

- 1 9. A network comprising:
2 Sub a plurality of nodes;
3 a plurality of links connecting the nodes; and
4 a mobile agent residing on a node of the network, where the mobile agent is able to
5 function as an application layer gateway.
- 1 10. The network of claim 9 further comprising:
2 a route device residing on one node of the network, the route device configured to divert
3 to the mobile agent traffic relevant to the mobile agent.
- 1 11. The network of claim 9 where the mobile agent functions as a web cache.
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12 12. The network of claim 9 where the mobile agent functions as a media transcoder.
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14 13. The network of claim 9 where the mobile agent functions as a firewall.
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16 14. The network of claim 10 where the agent may move automatically to a second node and
function as an application layer gateway.
- 1 15. The network of claim 9 further comprising:
2 a software module installed on the node on which the agent is installed, the software
3 module aiding in performing application layer gateway functionality.
- Sub-
A3 16. The method of claim 10 where the agent may automatically uninstall itself.

1 17. A method for providing functionality on a network, the network comprising nodes, the
2 method comprising:

3 an agent moving from a first device to a target device; and

4 at the target device, the agent accepting a data stream from a source, performing a
5 function on the data stream, and passing the data stream to one of a set of client devices.

1 18. The method of claim 17 where the function is a web cache function.

1 19. The method of claim 17 where the function is a media transcoder function.

1 20. The method of claim 17 where the function is a firewall function.

1 21. A set of instructions residing in a storage medium, said set of instructions capable of
2 being executed by a processor to implement a method for providing functionality on a network,
3 the method comprising:

4 an agent moving from a first device to a target device; and

5 the agent performing application layer gateway functionality at the target device.

1 22. The set of instructions of claim 21 where, to act as the application layer gateway, the
2 agent:

3 accepts traffic sent to the target device addressed to a client device;

4 performs at least one of filtering the traffic or modifying the traffic; and

5 sends the traffic to the client device.